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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/601,974	06/23/2003	Nicholas Mark Alford	348-035	1360

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EXAMINER

RODRIGUEZ, JOSEPH C

ART UNIT

PAPER NUMBER

3653

DATE MAILED: 04/21/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/601,974

Applicant(s)

ALFORD ET AL.

Examiner

Joseph C Rodriguez

Art Unit

3653

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
 - If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
 - If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
 - Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 2-6,9,12 and 15-30 is/are pending in the application.
- 4a) Of the above claim(s) 2-6,9 and 15-30 is/are withdrawn from consideration.
- 5) ☐ Claim(s) ____ is/are allowed.
- 6) ☒ Claim(s) 12,25 and 26 is/are rejected.
- 7) ☒ Claim(s) 27 is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 24 January 2005 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. ____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date 11/8/04, 1/24/05
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. ____
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: ____

Final Rejection

Applicant's arguments filed 1/31/05 have been fully considered but they are not persuasive for reasons detailed below.

The 35 U.S.C. 112 rejections are maintained or modified as follows:

These rejections have been withdrawn.

The prior art rejections are maintained or modified as follows:

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 12 and 25 are rejected under 35 U.S.C. 102(b) as being anticipated by Nakamura (US 4,722,788).

Nakamura teaches a magnetic separator (Fig. 8) comprising a plurality of tubes (41, 52) in a circular array (implicit from circular shape and annular chamber of first embodiment shown in fig. 4) disposable along a fluid flow path (from inlets 35, 36 to outlets 37, 38), wherein a magnetic shuttle (42) is movable between a separator position (col. 7, ln. 44-col. 8, ln. 10; Fig. 12b, above 44) and a release position (Fig. 12, within 53) within each tube. Here, the magnets are not directly connected, thus the magnets can be regarded as moving "independently" of each other. Further, Applicant

is respectfully reminded that claim language consisting of functional language and/or intended use phrasing is given little, if any, patentable weight as the apparatus must merely be capable of functioning, or being used, as claimed. See MPEP 2112.02, 2114. Here, it is possible to apply a differential pressure to the magnets taught by Nakamura, thus these magnets can be regarded as capable of being "movable by a differential pressure".

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claim 26 is rejected under 35 U.S.C. 103(a) as being unpatentable over Nakamura in view of Elliot (US 3,712,472) and Carr (US 4,457,838).

Nakamura as set forth above teaches all that is claimed except for expressly teaching an inlet for receiving a fluid to create differential pressure. Further, under an alternative interpretation, the limitation of said magnets movable by differential pressure may be regarded as absent. Elliot, however, teaches the use of differential pressure to move magnets between respective positions in multiple magnetic separator tubes (Fig. 2 showing inlet for fluid near 26; col. 5, ln. 10-col. 6, ln. 54). Moreover, the use of differential pressure can be regarded as an art recognized equivalent for moving magnetic shuttles in the magnetic separating arts as Elliot expressly teaches multiple

methods of moving the magnetic shuttles that include hydraulic and mechanical forces (col. 9, ln. 48 et seq.). See MPEP 2144.06. Further, Carr teaches that the use of fluid reduces the need for electric motors found in mechanical systems (col. 10, ln. 33-36). Therefore, it would have been obvious at the time the invention was made to a person having ordinary skill in the art to modify the invention of Nakamura by using differential pressure to move said magnets since Elliott teaches that differential pressure is an art recognized equivalent to the moving means taught by Nakamura.

Response to Arguments

Applicant's arguments that the prior art fails to teach the claimed features are unpersuasive and that the combination of Nakamura and Elliot is improper is unpersuasive. Here, it is noted that the claim limitation of "movable by differential pressure" differs from a positive recitation of the use of differential pressure (see e.g., claim 28 language "whereby the magnet moves between its positions by differential pressure"). In the first case, an external device could be regarded as supplying differential pressure and moving the magnets. In the latter case, differential pressure would be required in the Nakamura device to anticipate the claimed invention. Applicant appears to be arguing for the latter case even though the claim language does not support this interpretation. Further, even if the claim language is interpreted as requiring movement by differential pressure, Elliott teaches that this feature is obvious. Elliott as cited above expressly teaches that it is known to move magnet shuttles via both mechanical or hydraulic forces, thus it is unclear how Applicant can

argue that it is non-obvious to replace the rod structure of Nakamura with the hydraulic controls taught by Elliott. In view of the prior art, the claims stand rejected.

Allowable Subject Matter

Claim 27 is objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Election/Restrictions

Newly submitted claims 19-30 are directed to an invention that is independent or distinct from the invention originally claimed. Here, Applicant has added five additional claim groupings that can be regarded as distinct from the originally presented invention. For instance, the features of a circular array of balanced forces (claim 21) or chamber divided by a baffle plate (claim 30) render the newly presented claim groupings distinct. Further, these new claim groupings are sufficiently different as to each necessitate different prior art searches that can be regarded as burdensome.

Since applicant has received an action on the merits for the originally presented invention, this invention has been constructively elected by original presentation for prosecution on the merits. Accordingly, claims 19-30 are withdrawn from consideration as being directed to a non-elected invention. See 37 CFR 1.142(b) and MPEP § 821.03. Further, as claims 2-6, 9, and 15-18 depend from these new claims, these claims are also withdrawn from consideration.

Examiner has maintained the prior art rejections, statutory rejections and drawing objections as previously stated and as modified above. Applicant's amendment necessitated any new grounds of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a). The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the date of this final action.

Conclusion

Any references not explicitly discussed above but made of record are considered relevant to the prosecution of the instant application.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Joseph C Rodriguez whose telephone number is **571-272-6942**. The examiner can normally be reached on M-F during normal business hours (9 am – 6 pm, EST).

The **Official** fax phone number for the organization where this application or proceeding is assigned is **703-872-9326** (After-Final **703-972-9327**).

The examiner's **UNOFFICIAL Personal fax number** is **571-273-6942**.

Further, information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system.

Status information for published applications may be obtained from either Private PMR or Public PAIR. Status information for unpublished applications is available through Private PMR only.

For more information about the PAIR system, see

<http://pair-direct.uspto.gov>

Should you have questions on access to the Private PMR system, contact the Electronic Business Center (EBC) at **866-217-9197** (Toll Free).

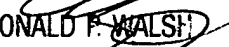
Alternatively, inquiries of a general nature or relating to the status of this application or proceeding can also be directed to the **Receptionist** whose telephone number is **571-272-6584**.

Signed by Examiner Joseph Rodriguez

jcr

April 15, 2005




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